



2.5 FLASH-ACCELERATED HARD DRIVE DATA SHEET

The Fastest PC Hard Drive

Combining flash technology with a hard drive platform, the FireCuda™ 2.5 flash-accelerated hard drive represents the fastest 2.5-inch hard drive available.



Best-Fit Applications

- Mainstream PCs upgrades
- High-performance PCs
- PC gaming systems
- Workstations
- Creative professional systems

Key Advantages

Flash-accelerated technology delivers blazing load speeds that allow for nonstop performance, play and productivity up to 5x faster than standard HDDs.

Enormous 500 GB, 1 TB and 2 TB options make FireCuda the highest-capacity 2.5-inch hard drive on the market, providing customers a high-performance experience while being able to store massive amounts of data, all within a thin 7mm z-Height.

Green Hybrid™ feature reduces device power consumption, helping users extend their drive's life and keep their costs down with a power-efficient drive.

Multi-Tier Caching Technology™ (MTC) enhances performance by using NAND flash, DRAM and media caching technologies, enabling users to load applications and files even faster.

Adaptive Memory™ technology identifies frequently accessed data, thereby providing the data faster, consuming less power and extending drive life.

The cutting edge never felt so safe — 5-year limited warranty is best-in-class for hard drive warranties.



Specifications	2 TB ¹	1 TB ¹	500 GB ¹
Standard Model Numbers	ST2000LX001	ST1000LX015	ST500LX025
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
Performance			
Bytes per Sector (logical/physical)	512/4,096	512/4,096	512/4,096
Data Transfer Rate (MB/s)	Up to 140	Up to 140	Up to 140
Versus 2.5-in. 5,400 RPM / 7,200 RPM HDD			
Game Load Test ²	140% Faster/50% Faster	140% Faster/50% Faster	140% Faster/50% Faster
Application Load Test ³	450% Faster/300% Faster	450% Faster/300% Faster	450% Faster/300% Faster
Windows 7 Boot Time ⁴	35% Faster/25% Faster	35% Faster/25% Faster	35% Faster/25% Faster
Reliability/Data Integrity			
Load/Unload Cycles	600,000	600,000	600,000
Head-Rest Method	QuietStep™ Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load
Non-recoverable Read Errors per Bits Read, Max	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴
Limited Warranty (years) ⁵	5	5	5
Power Management			
Startup Current (+5 V, A)	1.0	1.0	1.0
Read/Writer Power, Average (W)	1.7/1.8	1.6/1.7	1.6/1.7
Idle Power, Average (W)	0.5	0.45	0.45
Environmental			
Temperature, Operating (°C)	0 to 60	0 to 60	0 to 60
Temperature, Non-operating (°C)	-40 to 70	-40 to 70	-40 to 70
Shock, Operating: 2 ms (Gs)	400	400	400
Shock, Non-operating: 1 ms (Gs)	1,000	1,000	1,000
Acoustics, Idle, Typical (bels—sound power)	2.2	2.0	2.0
Acoustics, Seek, Typical (bels—sound power)	2.4	2.2	2.2
Physical			
Height (mm/in)	7.0/0.276	7.0/0.276	7.0/0.276
Width (mm/in)	69.85/2.750	69.85/2.750	69.85/2.750
Depth (mm/in)	100.35/3.951	100.35/3.951	100.35/3.951
Weight (g/lb, max)	96/0.212	92/0.203	92/0.203
Carton Unit Quantity	50	50	50
Cartons Per Pallet/Cartons Per Layer	60/10	60/10	60/10
Special Features			
Halogen-free	Yes	Yes	Yes
RoHS compliance	Yes	Yes	Yes

¹ One gigabyte, or GB equals one billion bytes; and one terabyte or TB, equals one trillion bytes when referring to drive capacity.

² Testing conducted by Seagate using PCMark 7 system storage gaming test. Results have been rounded for display purposes. HDD performance may vary by brand, model and application.

³ Testing conducted by Seagate using PCMark 7 system storage starting applications test. Results have been rounded for display purposes. HDD performance may vary by brand, model and application.

⁴ Testing conducted by Seagate using Intel Core i5-based with Intel QM77 chipset laptop and configured with 8GB RAM. Tested using Microsoft utility. Results have been rounded for display purposes. HDD performance may vary by brand, model and application.

⁵ Extended warranty products available. Consult your distributor for details.